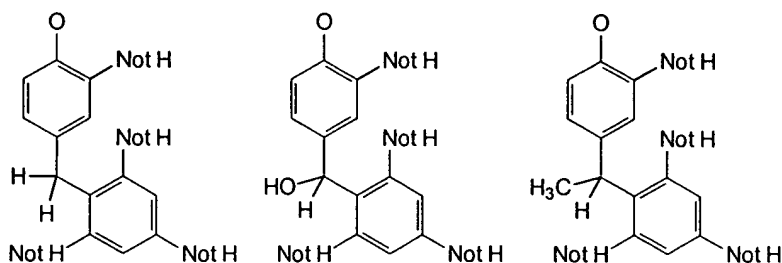


# C-linked Search

The structure for the search was:



The benzophenone gave 139 hits. These did not seem relevant so I did a search for the structure and (THYROID OR THYROMIMETIC OR ?THYRONINE). Four hits came up and they are at the bottom of this search.

L9 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 1999 ACS

AN 1999:9803 HCAPLUS

TI Preparation of phenoxyakanoates as thyroid hormone receptor .beta. agonists

IN Scanlan, Thomas S.; Chellini, Grazia; Yoshihara, Hikari; Apriletti, James;

Baxter, John D.; Ribeiro, Ralff C. J.

PA The Regents of the University of California, USA

SO PCT Int. Appl., 45 pp.

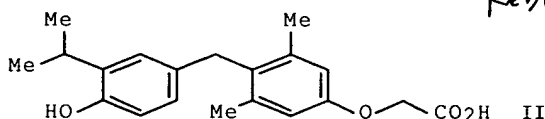
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9857919	A1	19981223	WO 98-US11758	19980608
	W: AU, CA, JP, KP, KR				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRAI	US 97-877792		19970618	corresponds to USPN 5,883,294	
GI				pub'd 3-6-99	
				Ribeiro	



AB R3OZ1CR1R2Z2O(CH2)nCO2R [I; R = H or (cyclo)alkyl; R1,R2 = H or alkyl; 1 of R1,R2 = H and the other = OH; R1R2 = O; R3 = H, (cyclo)alkyl, acyl; Z1 = (un)substituted 1,4-phenylene; Z2 = (un)substituted 3,5-dimethyl-4,1-phenylene] were prep'd. Thus, 4-bromo-2-isopropylanisole was condensed with 2,6-dimethyl-4-methoxybenzaldehyde (prepn. each given) and the product converted in 4 steps to title compd. II. Data for biol. activity of I were given.

IT 218431-15-3P

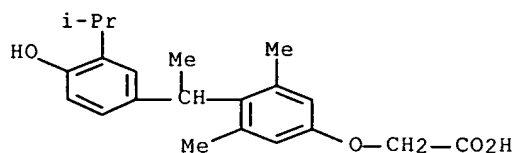
# C-linked Search

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of phenoxyakanoates as thyroid hormone receptor .beta. agonists)

RN 218431-15-3 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED



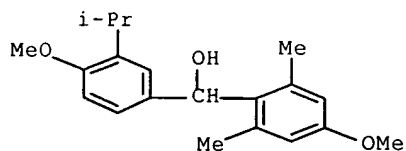
IT 211110-65-5P 218431-12-0P 218431-13-1P

218431-14-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of phenoxyakanoates as thyroid hormone receptor .beta. agonists)

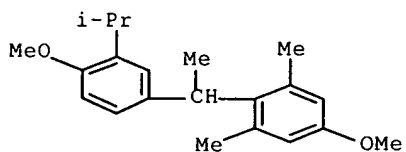
RN 211110-65-5 HCAPLUS

CN Benzenemethanol, 4-methoxy-.alpha.-[4-methoxy-3-(1-methylethyl)phenyl]-  
2,6-  
dimethyl- (9CI) (CA INDEX NAME)



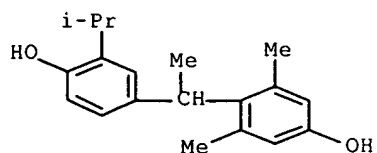
RN 218431-12-0 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

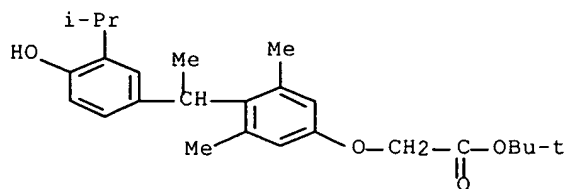


RN 218431-13-1 HCAPLUS

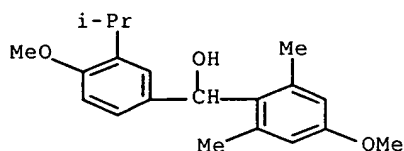
CN INDEX NAME NOT YET ASSIGNED



RN 218431-14-2 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED



L9 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 1999 ACS  
AN 1998:617873 HCAPLUS  
DN 129:302827  
TI An efficient substitution reaction for the preparation of thyroid hormone analoges  
AU Yoshihara, Hikari A. I.; Chiellini, Grazia; Mitchison, Timothy J.; Scanlan, Thomas S.  
CS Department of Cellular and Molecular Pharmacology, University of California, San Francisco, CA, 94143-0450, USA  
SO Bioorg. Med. Chem. (1998), 6(8), 1179-1183  
CODEN: BMECEP; ISSN: 0968-0896  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
AB The substitution of the sterically hindered carbon of the potent thyroid hormone agonist, GC-1, was effected by a reaction based on the solvolysis of the benzylic hydroxyl group. The reaction was found to proceed in high yield with a variety of nucleophiles including alcs., thiols, allyl silanes and electron-rich arom. compds., providing a convenient route to the synthesis of new thyroid hormone analogs.  
IT 211110-65-5  
RL: RCT (Reactant)  
(prepn. of thyroid hormone analoges via substitution reaction)  
RN 211110-65-5 HCAPLUS  
CN Benzenemethanol, 4-methoxy-.alpha.-[4-methoxy-3-(1-methylethyl)phenyl]-2,6-dimethyl- (9CI) (CA INDEX NAME)

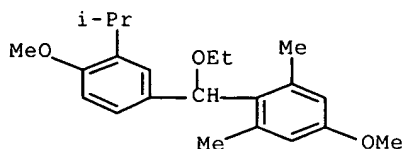


IT 214544-37-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of thyroid hormone analogs via substitution reaction)

RN 214544-37-3 HCAPLUS

CN Benzene, 2-[ethoxy[4-methoxy-3-(1-methylethyl)phenyl]methyl]-5-methoxy-  
1,3-  
dimethyl- (9CI) (CA INDEX NAME)



Chiellini et al., Chem. Biol.  
(1998), pp 299-306, 5(6).

L9 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 1999 ACS

AN 1998:435316 HCAPLUS

DN 129:157050

TI A high-affinity subtype-selective agonist ligand for the thyroid hormone receptor

AU Chiellini, Grazia; Apriletti, James W.; Yoshihara, Hikari A.; Baxter, John

D.; Ribeiro, Ralf C. J.; Scanlan, Thomas S.

CS Department of Pharmaceutical Chemistry and Cellular & Molecular Pharmacology, University of California, San Francisco, CA, 94143-0446,

USA

SO Chem. Biol. (1998), 5(6), 299-306

CODEN: CBOLE2; ISSN: 1074-5521

PB Current Biology Ltd.

DT Journal

LA English

AB Thyroid hormones regulate many different physiol. processes in different tissues in vertebrates. Most of the actions of thyroid hormones are mediated by the thyroid hormone receptor (TR), which is a member of the nuclear receptor superfamily of ligand-activated transcription regulators.

There are two different genes that encode two different TRs, TR.alpha.

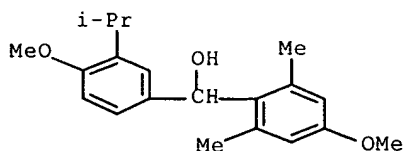
and

TR.beta., and these two TRs are often co-expressed at different levels in different tissues. Most thyroid hormones do not discriminate between the two TRs and bind both with similar affinities. The authors have designed and synthesized a thyroid hormone analog that has high affinity for the

TRs and is selective in both binding and activation functions for TR.beta. over TR.alpha.. The compd., GC-1, was initially designed to solve synthetic problems that limit thyroid hormone analog prepn., and contains several structural changes with respect to the natural hormone 3,5,3'-triiodo-L-thyronine (T3). These changes include replacement of the three iodines with Me and iso-Pr groups, replacement of the biaryl ether linkage with a methylene linkage, and replacement of the amino-acid sidechain with an oxyacetic-acid sidechain. The result of this study show that GC-1 is a member of a new class of thyromimetic compds. that are more synthetically accessible than traditional thyromimetics and have potentially useful receptor binding and activation properties. The TR.beta. selectivity of GC-1 is particularly interesting and suggests that GC-1 might be a useful in vivo probe for studying the physiol. roles of the different thyroid hormone receptor isoforms.

IT 211110-65-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (design and synthesis of high-affinity subtype-selective agonist ligand for thyroid hormone receptor)

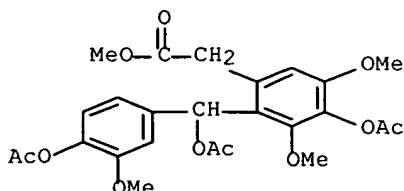
RN 211110-65-5 HCAPLUS  
 CN Benzenemethanol, 4-methoxy-.alpha.-[4-methoxy-3-(1-methylethyl)phenyl]-2,6-dimethyl- (9CI) (CA INDEX NAME)



L9 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1998:432999 HCAPLUS  
 DN 129:245014  
 TI Synthesis and biological activity of 2,3-benzopyrone analogs  
 AU Ji, Xiaoshen; Liang, Xiaotian  
 CS Department of Clinical Pharmacy, General Hospital of Air Force, PLA, Beijing, 100036, Peop. Rep. China  
 SO Yaoxue Xuebao (1998), 33(1), 72-74  
 CODEN: YHHPAL; ISSN: 0513-4870  
 PB Chinese Academy of Medical Sciences, Institute of Materia Media  
 DT Journal  
 LA Chinese  
 AB The Friedel-Crafts reaction was taken place with some replacement Ph acetic acid or its Me ester and vanillin reactants in the condition of Ac2O/ZnCl2. Two compds. showed obvious activities on the potassium channel and anticancer screen.

IT 213138-34-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (synthesis and biol. activity of 2,3-benzopyrone analogs)  
 RN 213138-34-2 HCAPLUS  
 CN Benzeneacetic acid, 4-(acetyloxy)-2-[(acetyloxy)[4-(acetyloxy)-3-methoxyphenyl]methyl]-3,5-dimethoxy-, methyl ester (9CI) (CA INDEX NAME)



L9 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1997:667252 HCAPLUS  
 DN 127:293323  
 TI Synthesis and Chemistry of CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub> Group 14/16 Derivatives  
 AU Krumm, Burkhard; Kirchmeier, Robert L.; Shreeve, Jean'ne M.  
 CS Department of Chemistry, University of Idaho, Moscow, ID, 83844-2343, USA  
 SO Inorg. Chem. (1997), 36(23), 5222-5230  
 CODEN: INOCAJ; ISSN: 0020-1669  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 127:293323; CJACS  
 AB Reactions of 4'-CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>Li, generated in situ, with elements of group 16 (S, Se, Te) lead to CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>SH (2), (CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>Se)<sub>2</sub> (3), and (CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>Te)<sub>2</sub> (4)/(CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>)<sub>2</sub>Te (4a). The phenol deriv. CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>OH (1) is obtained by reaction of CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>Li with B(OMe)<sub>3</sub>/H<sub>2</sub>O<sub>2</sub>. The reaction of CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>Li with trimethylsilyl chloride or trimethyltin chloride gives CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>XMe<sub>3</sub> (X = Si (5), Sn (6)). Oxidn. of 2 in the presence of bromine results in the formation of (CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>S)<sub>2</sub> (7) and CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>SO<sub>2</sub>Br (8). Mixed perfluoroaryloxy/thio ethers CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>SC<sub>6</sub>F<sub>4</sub>R (R = NO<sub>2</sub> (9), CN (10), CF<sub>3</sub> (11)) and CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>SC<sub>5</sub>F<sub>4</sub>N (12) are obtained upon reaction of 2 with excess C<sub>6</sub>F<sub>5</sub>R and pentafluoropyridine in the presence of K<sub>2</sub>CO<sub>3</sub>. With 4-C<sub>6</sub>F<sub>5</sub>OC<sub>6</sub>F<sub>4</sub>NO<sub>2</sub>, a mixt. of (2-CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>S)(4-C<sub>6</sub>F<sub>5</sub>OC<sub>6</sub>F<sub>4</sub>)C<sub>6</sub>F<sub>3</sub>NO<sub>2</sub> (13) and 9 is formed. Reaction of excess 2 with C<sub>6</sub>F<sub>5</sub>R gives the 2,4,6-substituted benzenes (CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>S)<sub>3</sub>C<sub>6</sub>F<sub>2</sub>R (R = NO<sub>2</sub> (14), CN (15)). The trimethylsilyl ether CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>OSiMe<sub>3</sub> (16) is prepd. from the reaction of 1 with hexamethyldisilazane. 16 is a convenient reagent for the prepn. of the aryl ethers CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>R (R = NO<sub>2</sub> (17), CN (18)) and CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>OC<sub>5</sub>F<sub>4</sub>N (19) upon reaction with C<sub>6</sub>F<sub>5</sub>R and C<sub>5</sub>F<sub>5</sub>N. The secondary alcs. CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>CH(C<sub>6</sub>H<sub>5</sub>)OH (20) and CF<sub>3</sub>C<sub>6</sub>F<sub>4</sub>OC<sub>6</sub>F<sub>4</sub>CH(C<sub>6</sub>F<sub>5</sub>)OH (21) are synthesized by the reactions of 5 with benzaldehyde and

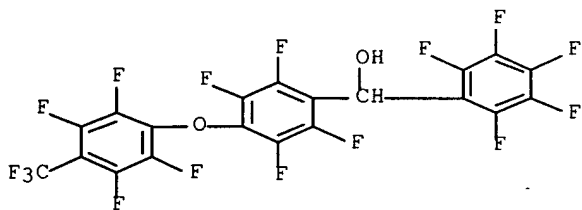
pentafluorobenzaldehyde in the presence of tetrabutylammonium fluoride as a catalyst. In the synthesis of 21 the byproduct  $\text{CF}_3\text{C}_6\text{F}_4\text{OC}_6\text{F}_4\text{CH}(\text{C}_6\text{F}_5)\text{OC}_6\text{F}_4\text{CHO}$  is also formed and isolated.

IT 197150-25-7P 197150-26-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

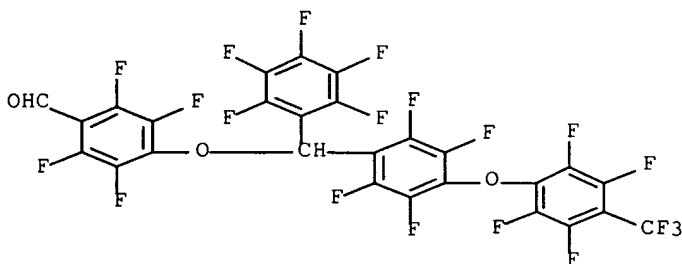
RN 197150-25-7 HCAPLUS

CN Benzenemethanol, 2,3,4,5,6-pentafluoro-.alpha.-[2,3,5,6-tetrafluoro-4-[2,3,5,6-tetrafluoro-4-(trifluoromethyl)phenoxy]phenyl]- (9CI) (CA INDEX NAME)



RN 197150-26-8 HCAPLUS

CN Benzaldehyde, 2,3,5,6-tetrafluoro-4-[(pentafluorophenyl) [2,3,5,6-tetrafluoro-4-[2,3,5,6-tetrafluoro-4-(trifluoromethyl)phenoxy]phenyl]methoxy]- (9CI) (CA INDEX NAME)



L9 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 1999 ACS

AN 1997:271246 HCAPLUS

DN 126:317282

TI Synthesis and hypolipidemic activity of diesters of aryl naphthalene lignan

and their heteroaromatic analogs

AU Kuroda, Tooru; Kondo, Kazuhiko; Iwasaki, Tameo; Ohtani, Akio; Takashima, Kohki

CS Res. Lab. Tanabe Seiyaku Co., Ltd., Osaka, 532, Japan

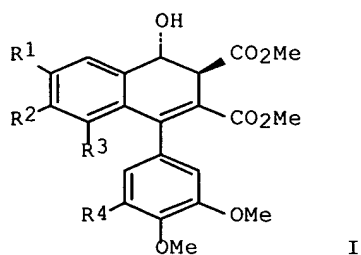
SO Chem. Pharm. Bull. (1997), 45(4), 678-684

CODEN: CPBTAL; ISSN: 0009-2363

PB Pharmaceutical Society of Japan





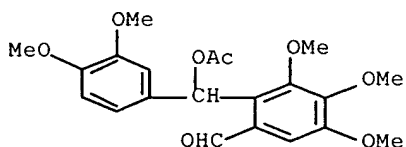


AB An efficient method for synthesizing naphthalenes I (R1=R2=R3 = OMe, R4 = H; R1,R2 = OCH2O, R3 = H, R4 = OMe) via the acid-catalyzed reaction of acetoxyaldehydes with di-Me maleate is presented. Also, the authors have shown that I (R1,R2 = OCH2O, R3 = H, R4 = OMe) can be transformed to (+-)-isopropodophyllin and (+-)-isopodophyllotoxin via stereocontrolled hydrogenations.

IT 131924-17-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (synthesis of (+-)-isopropodophyllin and (+-)-isopodophyllotoxin  
 via stereocontrolled hydrogenation of aryldihydrohydroxynaphthalenes)

RN 131924-17-9 HCAPLUS

CN Benzaldehyde, 2-[(acetyloxy)(3,4-dimethoxyphenyl)methyl]-3,4,5-trimethoxy-  
 (9CI) (CA INDEX NAME)



L9 ANSWER 8 OF 21 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:959433 HCAPLUS

DN 124:105580

TI Arylnaphthalene lignans as novel series of hypolipidemic agents raising high-density lipoprotein level

AU Iwasaki, Tameo; Kondo, Kazuhiko; Nishitani, Takashi; Kuroda, Tooru; Hirakoso, Kazuyuki; Ohtani, Akio; Takashima, Kohki

CS Res. Lab. Tanabe Seiyaku Co., Ltd., Osaka, 532, Japan

SO Chem. Pharm. Bull. (1995), 43(10), 1701-5  
 CODEN: CPBTAL; ISSN: 0009-2363

DT Journal

LA English

AB A series of arylnaphthalene lignans were prepd. and tested for hypolipidemic activity. The most potent compd. (TA-7552) not only reduced

## C-linked Search

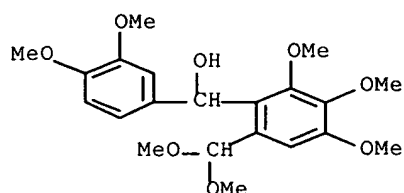
serum cholesterol, but also increased high-d. lipoproteins cholesterol in rats. The ED of TA-7552 is 100-fold less than that of cholestyramine. Structure-activity relations are discussed.

IT 104756-71-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(in prepn. of aryl naphthalene lignans as hypolipidemic agents  
increasing high-d. lipoproteins)

RN 104756-71-0 HCAPLUS

CN Benzenemethanol, 6-(dimethoxymethyl)-.alpha.-(3,4-dimethoxyphenyl)-2,3,4-trimethoxy- (9CI) (CA INDEX NAME)



L9 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 1999 ACS

AN 1995:794873 HCAPLUS

DN 123:198645

TI Preparation of balanoids as protein kinase C inhibitors

IN Hall, Steven Edward; Ballas, Lawrence M.; Kulanthaivel, Palaniappan;  
Boros, Christie; Jiang, Jack B.; Jagdmann, Gunnar Erik, Jr.; Lai, Yen-Shi;

Biggers, Christopher K.; Hu, Hong; et al.

PA Nichols, Gina M., USA; Sphinx Pharmaceuticals Corporation

SO PCT Int. Appl., 559 pp.

CODEN: PIXXD2

DT Patent

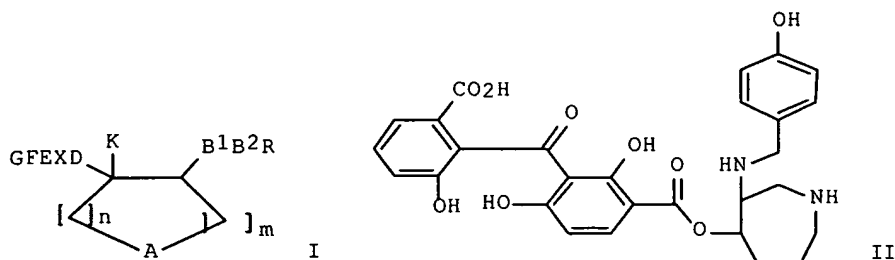
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 9420062	A2	19940915	WO 94-US2283	19940302
	WO 9420062	A3	19960815		
	W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, UZ, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2157412	AA	19940915	CA 94-2157412	19940302
	AU 9462527	A1	19940926	AU 94-62527	19940302
	EP 687249	A1	19951220	EP 94-909847	19940302
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
SE	JP 09503994	T2	19970422	JP 94-520148	19940302
	ZA 9401478	A	19950905	ZA 94-1478	19940303
PRAI	US 93-25846		19930303		
	WO 94-US2283		19940302		

OS MARPAT 123:198645

GI



AB Title compds. [I; A = CH<sub>2</sub>, NR<sub>1</sub>, O, S, SO<sub>2</sub>; B<sub>1</sub> = NR<sub>2</sub>, CH<sub>2</sub>, O; B<sub>2</sub> = CO, CS, SO<sub>2</sub>; D = NR<sub>3</sub> = O, CH<sub>2</sub>; E = R<sub>5</sub>, (un)substituted (hetero)arylene; F = CO or CH<sub>2</sub>; G = R<sub>7</sub>, cycloalkyl, (un)substituted (hetero)aryl; K = H, alkyl; R = R<sub>4</sub>, (un)substituted Ph, (hetero)aryl; R<sub>1</sub>-R<sub>4</sub>, R<sub>7</sub> = H, alkyl, aryl, etc.;

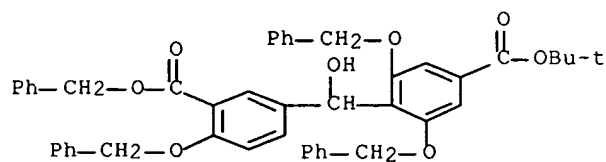
R<sub>5</sub> = alkyl, aryl; X = CO, CS, CH<sub>2</sub>, etc.; m, n = 1-4] were prepd. Thus, title compd. (-)-trans-II (prepn. given) gave 100% inhibition of protein kinase C .beta.2 at 0.5.mu.M.

IT 167832-20-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of balanoids as protein kinase C inhibitors)

RN 167832-20-4 HCAPLUS

CN Benzoic acid, 4-[hydroxy[4-(phenylmethoxy)-3-[(phenylmethoxy)carbonyl]phenyl]methyl]-3,5-bis(phenylmethoxy)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



L9 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 1999 ACS

AN 1991:206825 HCAPLUS

DN 114:206825

TI Preparations of hypolipemic 1-phenyl-2,3-bis(alkoxycarbonyl)-4-hydroxynaphthalenes and their intermediates

IN Iwasaki, Tameo; Nishitani, Takashi; Omizu, Hiroshi; Takahashi, Masami; Oogiku, Ko

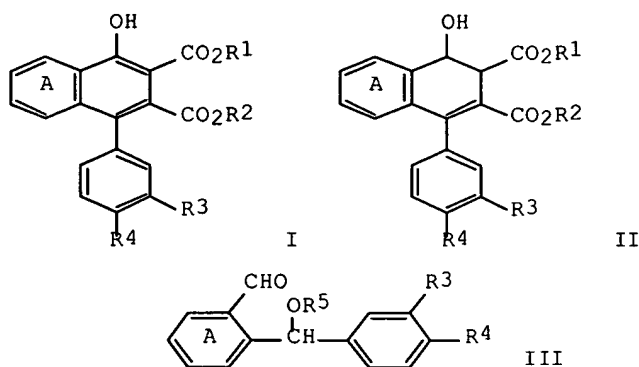
## C-linked Search

PA Tanabe Seiyaku Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF

DT Patent  
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02300148	A2	19901212	JP 89-117955	19890511
OS	MARPAT 114:206825				
GI					

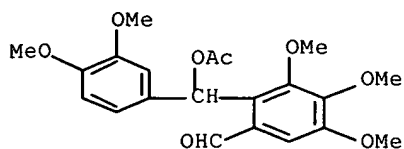


AB A process for the prepn. of the title compds. I (R1, R2 = lower alkyl;  
 R3,  
 R4 = H, lower alkoxy; R3 and/or R4 = lower alkoxy; ring A may be  
 substituted) or their salts, useful as hypolipemics (no data), by oxidn.  
 of dihydronaphthalenes II or their salts, which may be prepd. by  
 treatment  
 of 2-(phenylhydroxymethyl)benzaldehydes III (R5 = H, hydroxy-protective  
 group), their di-lower alkyl acetals, or their salts with  
 R1OCOCH:CHCO2R2,  
 optionally followed by salt formation, and II or their salts are claimed.  
 2-(.alpha.-Hydroxy-3,4-dimethoxybenzyl)-3,4,5-trimethoxybenzaldehyde di-  
 Me  
 acetal (816 mg) in di-Me maleate was added dropwise to CF3CO2H in di-Me  
 maleate at 70.degree. over 2.5 h and the reaction mixt. was further  
 stirred at 70.degree. for 1.5 h to give 330 mg (r-3,t-4)-II (R1 = R2 =  
 Me,  
 R3 = R4 = OMe, 6, 7, and 8-positions are substituted with OMe). This  
 (600  
 mg) in dioxane was treated with 2,3-dichloro-5,6-dicyanobenzoquinone  
 under  
 stirring at 80.degree. for 35 h to give 240 mg I (R1 = R2 = Me, R3 = R4 =  
 OMe, 6, 7, and 8-positions are substituted with OMe).  
 IT 131924-17-9P 131924-18-0P 133491-26-6P  
 133491-27-7P 133491-28-8P 133491-29-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and cyclocondensation of, with dialkyl maleate or fumarate,

phenylhydroxydihydronaphthalenedicarboxylate from)

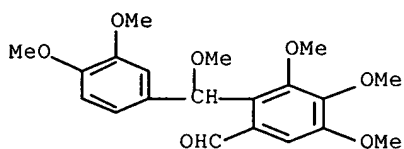
RN 131924-17-9 HCAPLUS

CN Benzaldehyde, 2-[(acetyloxy)(3,4-dimethoxyphenyl)methyl]-3,4,5-trimethoxy-  
(9CI) (CA INDEX NAME)



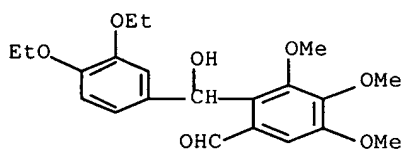
RN 131924-18-0 HCAPLUS

CN Benzaldehyde, 2-[(3,4-dimethoxyphenyl)methoxymethyl]-3,4,5-trimethoxy-  
(9CI) (CA INDEX NAME)



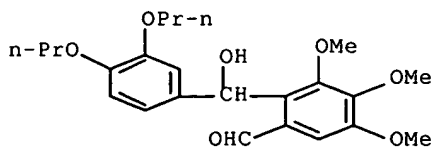
RN 133491-26-6 HCAPLUS

CN Benzaldehyde, 2-[(3,4-diethoxyphenyl)hydroxymethyl]-3,4,5-trimethoxy-  
(9CI) (CA INDEX NAME)



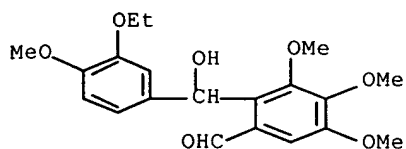
RN 133491-27-7 HCAPLUS

CN Benzaldehyde, 2-[(3,4-dipropoxyphenyl)hydroxymethyl]-3,4,5-trimethoxy-  
(9CI) (CA INDEX NAME)



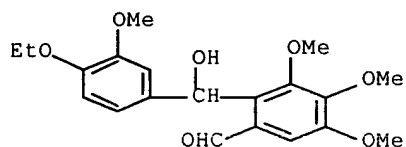
RN 133491-28-8 HCAPLUS

CN Benzaldehyde, 2-[(3-ethoxy-4-methoxyphenyl)hydroxymethyl]-3,4,5-trimethoxy-  
(9CI) (CA INDEX NAME)



RN 133491-29-9 HCAPLUS

CN Benzaldehyde, 2-[(4-ethoxy-3-methoxyphenyl)hydroxymethyl]-3,4,5-trimethoxy-  
(9CI) (CA INDEX NAME)

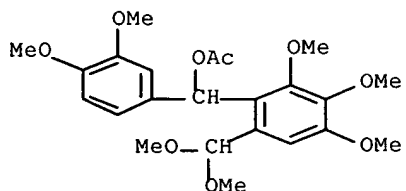


IT 131924-15-7P 131924-16-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and deacetalization of)

RN 131924-15-7 HCAPLUS

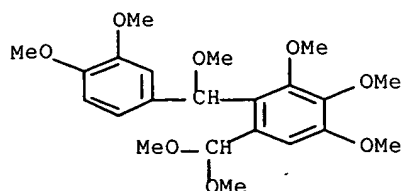
CN Benzenemethanol, 6-(dimethoxymethyl)-.alpha.-(3,4-dimethoxyphenyl)-2,3,4-trimethoxy-, acetate (9CI) (CA INDEX NAME)



RN 131924-16-8 HCAPLUS

CN Benzene, 1-(dimethoxymethyl)-2-[(3,4-dimethoxyphenyl)methoxymethyl]-3,4,5-trimethoxy- (9CI) (CA INDEX NAME)

## C-linked Search



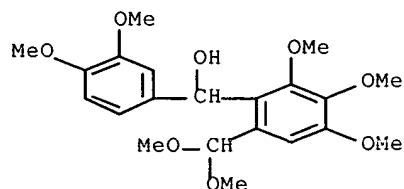
IT 104756-71-0

RL: RCT (Reactant)

(reaction of, in prepn. of hypolipemic dialkyl  
(alkoxyphenyl)hydroxynaphthalenedicarboxylates)

RN 104756-71-0 HCAPLUS

CN Benzenemethanol, 6-(dimethoxymethyl)-.alpha.-(3,4-dimethoxyphenyl)-2,3,4-trimethoxy- (9CI) (CA INDEX NAME)



L9 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 1999 ACS

AN 1991:81276 HCAPLUS

DN 114:81276

TI Process for preparing 1-hydroxy-4-phenylnaphthalene-2,3-dicarboxylates  
useful as antihyperlipidemics

IN Iwasaki, Tameo; Ohmizu, Hiroshi; Tsuyoshi, Ohgiku

PA Tanabe Seiyaku Co., Ltd., Japan

SO Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DT Patent

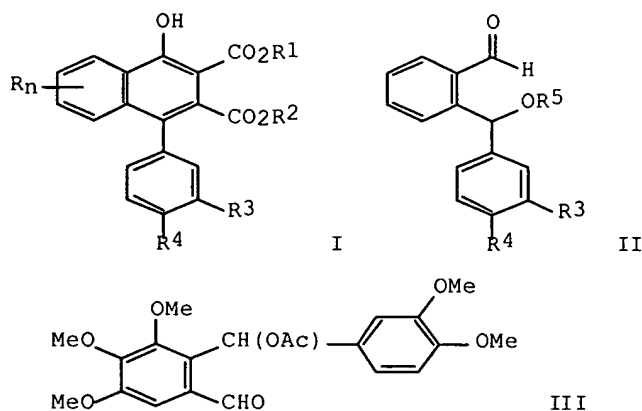
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	EP 379935	A1	19900801	EP 90-100832	19900116
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL				
	CN 1044456	A	19900808	CN 89-109662	19891228
	ZA 9000077	A	19901031	ZA 90-77	19900105
	CA 2007581	AA	19900727	CA 90-2007581	19900111
	HU 53862	A2	19901228	HU 90-173	19900117
	AU 9048591	A1	19900802	AU 90-48591	19900118
	AU 616337	B2	19911024		

# C-linked Search

JP 02275840	A2	19901109	JP 90-15838	19900125
NO 9000381	A	19900730	NO 90-381	19900126
SU 1831473	A3	19930730	SU 90-4742864	19900126
PRAI JP 89-18587	19890127			
OS MARPAT 114:81276				
GI				

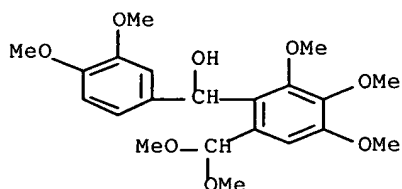


AB Naphthalene derivs. [I; R = substituent; R1, R2 = alkyl, one of R3 and R4 is H, alkoxy, the other is alkoxy; n = 0-3], useful as hypolipidemic agents (no data), are prepd. by cyclocondensation of benzaldehyde derivs II (R5 = protecting group) with R1O2CC.tplbond.CCO2R2 followed by optional salt formation. A mixt. of benzaldehyde deriv. III (prepn. given) and MeO2CC.tplbond.CCO2Me in CF3CO2H and C6H6 was heated at 60.degree. to give 77% I [Rn = 6,7,8-(MeO)3, R1 = R2 = Me; R3 = R4 = MeO]. Also prepd. was 22 addnl. I.

IT **104756-71-0**  
 RL: RCT (Reactant)  
 (acetylation of)

RN 104756-71-0 HCAPLUS

CN Benzenemethanol, 6-(dimethoxymethyl)-.alpha.-(3,4-dimethoxyphenyl)-2,3,4-trimethoxy- (9CI) (CA INDEX NAME)

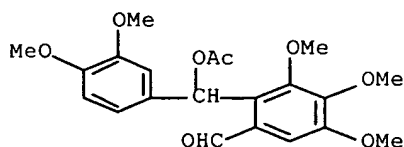




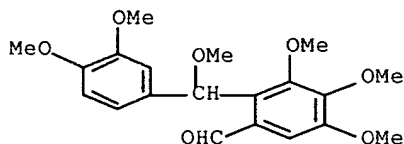
IT 131924-17-9P 131924-18-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and cyclocondensation of, with di-Me acetylenedicarboxylate)

RN 131924-17-9 HCAPLUS

CN Benzaldehyde, 2-[(acetyloxy)(3,4-dimethoxyphenyl)methyl]-3,4,5-trimethoxy-  
(9CI) (CA INDEX NAME)

RN 131924-18-0 HCAPLUS

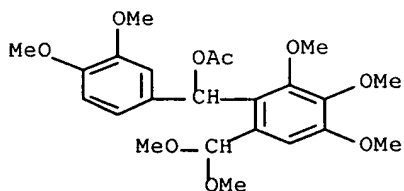
CN Benzaldehyde, 2-[(3,4-dimethoxyphenyl)methoxymethyl]-3,4,5-trimethoxy-  
(9CI) (CA INDEX NAME)

IT 131924-15-7P 131924-16-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and hydrolysis of)

RN 131924-15-7 HCAPLUS

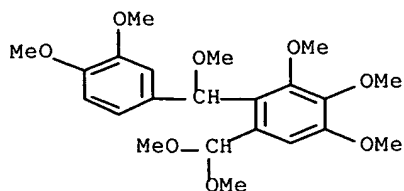
CN Benzenemethanol, 6-(dimethoxymethyl)-.alpha.-(3,4-dimethoxyphenyl)-2,3,4-trimethoxy-, acetate (9CI) (CA INDEX NAME)



RN 131924-16-8 HCAPLUS

## C-linked Search

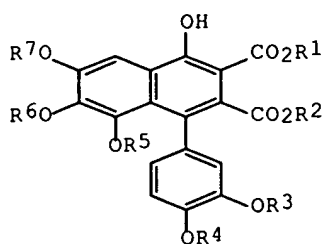
CN Benzene, 1-(dimethoxymethyl)-2-[(3,4-dimethoxyphenyl)methoxymethyl]-  
3,4,5-  
trimethoxy- (9CI) (CA INDEX NAME)



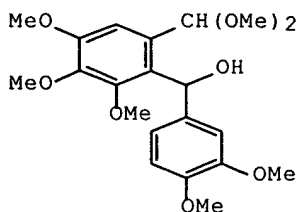
L9 ANSWER 12 OF 21 HCAPLUS COPYRIGHT 1999 ACS  
AN 1990:630978 HCAPLUS  
DN 113:230978  
TI Preparation of 1-(3,4-dialkoxyphenyl)-6,7,8-trialkoxy-4-hydroxynaphthalene-2,3-dicarboxylates as hypolipemic agents  
IN Suzuki, Takashi; Yamamura, Minehiko; Yamada, Sinichi  
PA Tanabe Seiyaku Co., Ltd., Japan  
SO Eur. Pat. Appl., 8 pp.  
CODEN: EPXXDW  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 371484	A2	19900606	EP 89-122010	19891129
	EP 371484	A3	19910410		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 02149546	A2	19900608	JP 88-303335	19881129
	CA 2002612	AA	19900629	CA 89-2002612	19891109
	CN 1043932	A	19900718	CN 89-108652	19891116
	US 5066825	A	19911119	US 89-437065	19891116
	ZA 8908900	A	19900829	ZA 89-8900	19891122
	AU 8945513	A1	19900607	AU 89-45513	19891123
	AU 613250	B2	19910725		
	DK 8905996	A	19900530	DK 89-5996	19891128
	NO 8904737	A	19900530	NO 89-4737	19891128
	NO 170010	B	19920525		
	NO 170010	C	19920902		
	HU 53060	A2	19900928	HU 89-6312	19891129
	HU 204023	B	19911128		
PRAI	JP 88-303335		19881129		
OS	MARPAT 113:230978				
GI					

# C-linked Search



I



II

AB The title compds. (I; R1-R7 = alkyl) were prepd. as hypolipemics (no data)

by cyclocondensation of hydroxybenzylbenzaldehyde acetals with acetylenedicarboxylates. Thus, 3,4,5-(MeO)3C6H2CH(OMe)2 (prepn. given) was stirred 30 min at 0.degree. with BuLi in THF after which 3,4-(MeO)2C6H3CHO was added and the whole stirred 2 h at 0-10.degree. to give aldol product II which was refluxed 3 h with MeO2CC.tplbond.CC(=O)OMe

in

PhMe contg. 4-MeC6H4SO3H to give I (R1 - R7 = Me).

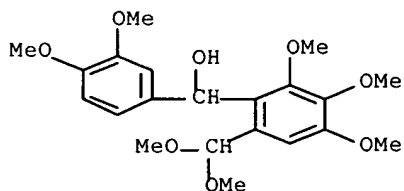
IT 104756-71-0P 130422-12-7P 130422-13-8P

130422-14-9P 130422-15-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and reaction of, in prepn. of hypolipemic agents)

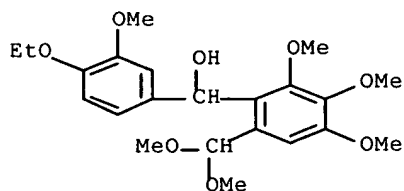
RN 104756-71-0 HCAPLUS

CN Benzenemethanol, 6-(dimethoxymethyl)-.alpha.-(3,4-dimethoxyphenyl)-2,3,4-trimethoxy- (9CI) (CA INDEX NAME)



RN 130422-12-7 HCAPLUS

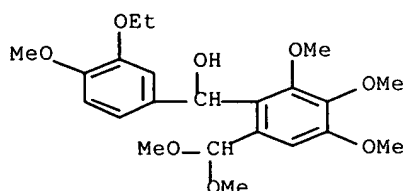
CN Benzenemethanol, 6-(dimethoxymethyl)-.alpha.-(4-ethoxy-3-methoxyphenyl)-2,3,4-trimethoxy- (9CI) (CA INDEX NAME)



C-linked Search

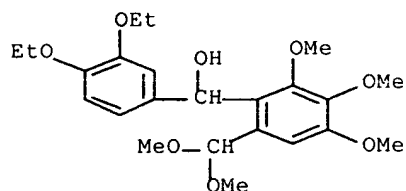
RN 130422-13-8 HCAPLUS

CN Benzenemethanol, 6-(dimethoxymethyl)-.alpha.-(3-ethoxy-4-methoxyphenyl)-2,3,4-trimethoxy- (9CI) (CA INDEX NAME)



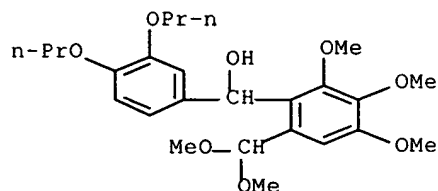
RN 130422-14-9 HCAPLUS

CN Benzenemethanol, .alpha.-(3,4-diethoxyphenyl)-6-(dimethoxymethyl)-2,3,4-trimethoxy- (9CI) (CA INDEX NAME)



RN 130422-15-0 HCAPLUS

CN Benzenemethanol, 6-(dimethoxymethyl)-.alpha.-(3,4-dipropoxyphenyl)-2,3,4-trimethoxy- (9CI) (CA INDEX NAME)



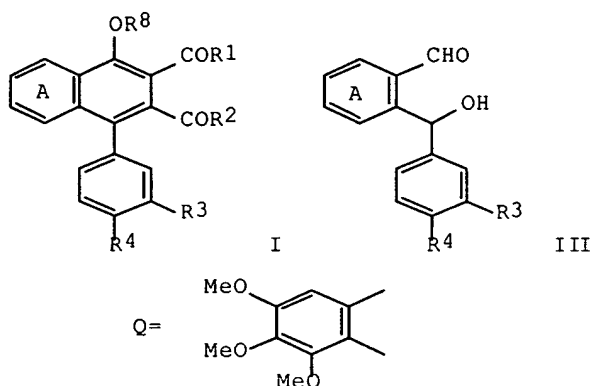
L9 ANSWER 13 OF 21 HCAPLUS COPYRIGHT 1999 ACS

AN 1990:55275 HCAPLUS

DN 112:55275

TI Preparation of phenylnaphthoates and phenylnaphthamides as hypolipemics  
 PA Tanabe Seiyaku Co., Ltd., Japan  
 SO Austrian, 17 pp.  
 CODEN: AUXXAK  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	AT 388372	B	19890612	AT 87-2625	19871008
	AT 8702625	A	19881115		
OS	MARPAT 112:55275				
GI					



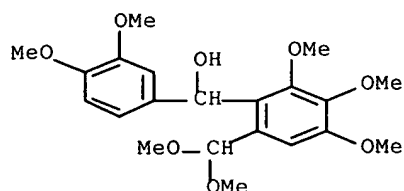
AB The title compds. [I; A = (un)substituted benzene ring; R1, R2 = C1-4 alkoxy, OR5, NHR5, NR6R7; R3, R4 = H, C1-4 alkoxy; R5 = (un)substituted C1-4 alkyl, C5-10 alkyl, C2-10 alkenyl, C5-8 cycloalkyl, 5- or 6-membered N-heterocyclyl; R6, R7 = H, C1-4 alkyl; R8 = H] and their salts were prepd. as hypolipemics useful for the prevention and treatment of arteriosclerosis, by a cyclocondensation reaction of acetylenedicarboxylates R1COC.tplbond.CCOR2 (II) (R1, R2 as above) with III (R3, R4 as defined) or by esterification or amidation of I (R1 = OH) with R1H. Thus, a mixt. of 1.4 g 1-(3,4-dimethoxyphenyl)-2-methoxycarbonyl-4-benzyloxy-6,7,8-trimethoxy-3-naphthoic acid, 183 mg H2NCH2CHMe2, and 336 mg 1-hydroxybenzotriazole in THF was treated and stirred with 570 mg N,N'-dicyclohexylcarbodiimide for 2 h at 0.degree.

and 12 h at room temp. The intermediate 4-benzyloxy-3-naphthamide was deprotected by stirring 2 h with Pd/C in MeOH, in a H atm. at 3 kg/cm2, to give 1.1 g I (R1 = HNCH2CHMe2, R2-R4 = OMe, R8 = H, A = Q). The latter in rats reduced total serum cholesterol 60% and increased serum HDL-cholesterol 99%.

IT 104756-71-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and reaction of, in prepn. of hypolipemic)

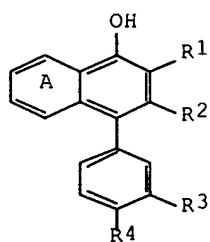
# C-linked Search

RN 104756-71-0 HCAPLUS  
 CN Benzenemethanol, 6-(dimethoxymethyl)-.alpha.-(3,4-dimethoxyphenyl)-2,3,4-trimethoxy- (9CI) (CA INDEX NAME)

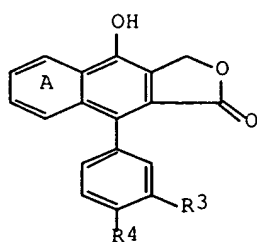


L9 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1988:630583 HCAPLUS  
 DN 109:230583  
 TI Preparation of 4-phenyl-1-naphthol derivatives as hypolipidemic agents  
 IN Iwasaki, Tameo; Takashima, Koki  
 PA Tanabe Seiyaku Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 14 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63146845	A2	19880618	JP 87-160720	19870626
PRAI	JP 86-155413		19860701		
OS	MARPAT 109:230583				
GI					



I



II

AB Title compds. I or II (R1 = H, alkoxycarbonyl; R2 = alkoxycarbonyl; R3,  
 R4 = H, alkoxy, but R3 = R4 .noteq. H; ring A may be substituted) and their  
 salts are prepd. as hypolipidemic agents. A soln. of 204.0 g  
 2-bromo-3,4,5-trimethoxybenzaldehyde di-Me acetal in THF was treated with  
 BuLi at -70.degree. to -60.degree., then a soln. of 105.5 g

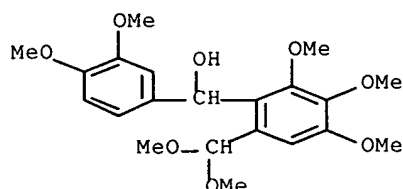
## C-linked Search

3,4-(MeO)2C6H3CHO in THF was added to give 266 g 2-(3,4-dimethoxy-  
.alpha.-hydroxybenzyl)-3,4,5-trimethoxybenzaldehyde di-Me acetal, which was  
treated with 95 mL MeO2CC.tplbond.CCO2Me and 300 mg p-MeC6H4SO3H.H2O in  
benzene under reflux 2 h to give 202 g 1-(3,4-dimethoxyphenyl)-2,3-  
bis(methoxycarbonyl)-4-hydroxy-6,7,8-trimethoxynaphthalene (III). Rats  
fed with a feed contg. 20 mg% III showed serum cholesterol decrease by  
52%  
and HDL-cholesterol increase by 86%.

IT **104756-71-0P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and cycloaddn. of, with di-Me acetylenedicarboxylate)

RN 104756-71-0 HCAPLUS

CN Benzenemethanol, 6-(dimethoxymethyl)-.alpha.-(3,4-dimethoxyphenyl)-2,3,4-  
trimethoxy- (9CI) (CA INDEX NAME)



L9 ANSWER 15 OF 21 HCAPLUS COPYRIGHT 1999 ACS

AN 1988:221419 HCAPLUS

DN 108:221419

TI Hypolipidemic naphthalenedicarboxylate derivatives, processes for their  
preparation, and their pharmaceutical compositions

IN Iwasaki, Tameo; Takashima, Kohki

PA Tanabe Seiyaku Co., Ltd., Japan

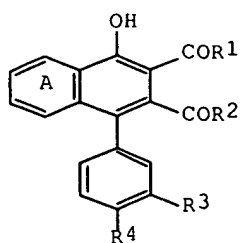
SO Eur. Pat. Appl., 34 pp.  
CODEN: EPXXDW

DT Patent

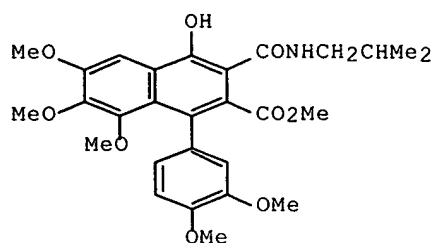
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 251315	A2	19880107	EP 87-109481	19870701
	EP 251315	A3	19890607		
	EP 251315	B1	19911009		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 63010746	A2	19880118	JP 86-155416	19860701
	US 4840951	A	19890620	US 87-64293	19870617
	CA 1294278	A1	19920114	CA 87-540829	19870629
	AT 68172	E	19911015	AT 87-109481	19870701
	ES 2038622	T3	19930801	ES 87-109481	19870701
PRAI	JP 86-155416		19860701		
	EP 87-109481		19870701		
OS	MARPAT 108:221419				
GI					



I



II

AB Title compds. I (R1, R2 = OR5, NHR5, NR6R7; one of R1 and R2 may = lower alkoxy; R3, R4 = lower alkoxy; one of R3 and R4 may = H; R5 = substituted alkyl, heterocyclyl, or alkenyl; R6, R7 = H, lower alkyl; ring A may be substituted) are prepd. for use as hypolipidemic agents. Amidation of 1-(3,4-dimethoxyphenyl)-2-methoxycarbonyl-4-benzyloxy-6,7,8-trimethoxy-3-naphthoic acid with isobutylamine using 1-hydroxybenzotriazole and DCC, followed by hydrogenolysis of the benzyl group over Pd/C at 3 kg/cm<sup>2</sup> H, gave

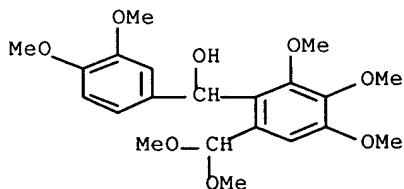
(dimethoxyphenyl) (methoxycarbonyl) (isobutylcarbamoyl)hydroxytrimethoxynaphthalene II. At 100 mg/kg orally in rats, II decreased serum cholesterol by 60.0% and increased serum HDL-cholesterol by 99.0%.

IT 104756-71-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (prepn. and cyclocondensation of, with acetylenedicarboxylate)

RN 104756-71-0 HCAPLUS

CN Benzenemethanol, 6-(dimethoxymethyl)-.alpha.-(3,4-dimethoxyphenyl)-2,3,4-trimethoxy- (9CI) (CA INDEX NAME)



L9 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 1999 ACS

AN 1986:572073 HCAPLUS

DN 105:172073

TI Naphthalene derivatives and their pharmaceutical compositions

IN Iwasaki, Tameo; Takashima, Kohki

PA Tanabe Seiyaku Co., Ltd. , Japan

SO Eur. Pat. Appl., 70 pp.

CODEN: EPXXDW

DT Patent

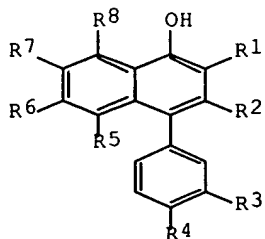
LA English



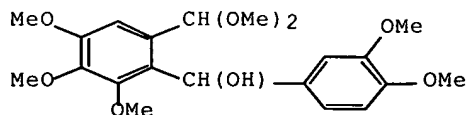
## C-linked Search

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	EP 188248	A3	19861217		
	EP 188248	B1	19900711		
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	IL 77457	A1	19910310	IL 85-77457	19851226
	IL 91117	A1	19910310	IL 85-91117	19851226
	NO 8505355	A	19860711	NO 85-5355	19851230
	NO 170760	B	19920824		
	NO 170760	C	19921202		
	ES 550578	A1	19870516	ES 85-550578	19851230
	US 4771072	A	19880913	US 85-814805	19851230
	AU 8551751	A1	19860717	AU 85-51751	19851231
	AU 584153	B2	19890518		
	JP 61267541	A2	19861127	JP 86-2624	19860108
	FI 8600089	A	19860711	FI 86-89	19860109
	FI 87557	B	19921015		
	FI 87557	C	19930125		
	HU 42428	A2	19870728	HU 86-90	19860109
	HU 196737	B	19890130		
	SU 1581217	A3	19900723	SU 86-4013137	19860109
	CN 86100090	A	19860820	CN 86-100090	19860110
	CN 1006464	B	19900117		
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	AT 54441	E	19900715	AT 86-100282	19860110
	ES 557052	A1	19871216	ES 86-557052	19860903
	SU 1577697	A3	19900707	SU 86-4028493	19861113
	US 4897418	A	19900130	US 88-144650	19880111
	DD 270529	A5	19890802	DD 88-312249	19880115
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	JP 06000724	B4	19940105		
	JP 02072136	A2	19900312	JP 88-310353	19881208
	JP 02072170	A2	19900312	JP 88-310354	19881208
	JP 05049668	B4	19930726		
	US 5070103	A	19911203	US 90-459859	19900102
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	JP 86-2624		19850110		
	IL 85-77457		19851226		
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	EP 86-100282		19860110		
	US 88-144650		19880111		
GI					



I



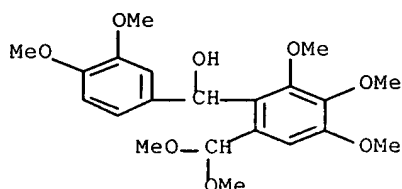
II

AB Naphthalene derivs. I (R1 = H, alkoxy-carbonyl; R2 = alkoxy-carbonyl; R1R2 = CH2O2C; R3 or R4 = alkoxy, the other = H, alkoxy; R5-R8 = H, substituent) were prepd. (40 examples) as agents for the treatment or prophylaxis of hyperlipidemia and/or arteriosclerosis. Thus, 2,3,4,5-Br(MeO)3C6HCH(OMe)2 in THF was treated with BuLi and 3,4-(MeO)2C6H3CHO to give benzaldehyde deriv. II, which reacted with MeO2CC.tplbond.CCO2Me in the presence of p-MeC6H4SO3H.H2O to give I (R1 = R2 = CO2Me, R3-R7 = OMe, R8 = H) (III). At 20 mg% in the diet of rats, III gave 52% redn. of total serum cholesterol, and increased serum HDL-cholesterol by 86%.

IT 104756-71-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and cyclocondensation of, with acetylenedicarboxylate)

RN 104756-71-0 HCAPLUS

CN Benzenemethanol, 6-(dimethoxymethyl)-.alpha.-(3,4-dimethoxyphenyl)-2,3,4-trimethoxy- (9CI) (CA INDEX NAME)



L9 ANSWER 17 OF 21 HCAPLUS COPYRIGHT 1999 ACS

AN 1986:226523 HCAPLUS

DN 104:226523

TI Chemical structures of sulfuric acid lignin. IX. Reaction of syringyl alcohol and reactivity of guaiacyl and syringyl nuclei in sulfuric acid solution

AU Yasuda, Seiichi; Ota, Katsuhito

CS Fac. Agric., Nagoya Univ., Nagoya, 464, Japan

SO Mokuzai Gakkaishi (1986), 32(1), 51-8  
 CODEN: MKZGA7; ISSN: 0021-4795

DT Journal

LA English

AB The behavior of syringyl and guaiacyl nucleus of lignin in H2SO4 was studied by model reaction of syringyl alc. [530-56-3], 3,4,5-trimethoxybenzyl alc. [3840-31-1], vanillyl alc. (I) [498-00-0] and veratryl alc. [93-03-8] with creosol (II) [93-51-6] and II Me ether [494-99-5]; reaction of acetoguaiacone Me ether [91-10-1] with II, condensation of I with various arom. compds.; condensation of apocynol Me ether [5653-65-6] with II and 5-methoxycresol [6638-05-7]; and condensation of propionaldehyde [123-38-6] with II. Based on results from the reaction of I with arom. compds. in 5% H2SO4, the reactivity of

C-linked Search

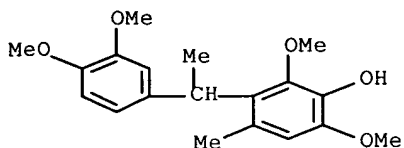
arom. nuclei decreased in the order: syringyl > etherified syringyl > etherified guaiacyl > guaiacyl.

IT 102430-92-2P

RL: FORM (Formation, nonpreparative); PREP (Preparation)  
(formation of, in model reactions for lignin in sulfuric acid)

RN 102430-92-2 HCAPLUS

CN Phenol, 3-[1-(3,4-dimethoxyphenyl)ethyl]-2,6-dimethoxy-4-methyl- (9CI)  
(CA INDEX NAME)

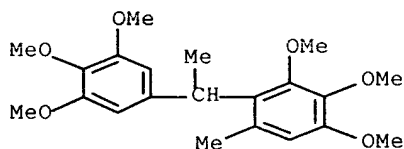


IT 102415-83-8

RL: RCT (Reactant)  
(reaction of, with creosol, in sulfuric acid, as lignin model)

RN 102415-83-8 HCAPLUS

CN Benzene, 1,2,3-trimethoxy-5-methyl-4-[1-(3,4,5-trimethoxyphenyl)ethyl]- (9CI) (CA INDEX NAME)



L9 ANSWER 18 OF 21 HCAPLUS COPYRIGHT 1999 ACS

AN 1983:612363 HCAPLUS

DN 99:212363

TI Hydroxy acetals, phthalans, and isobenzofurans therefrom

AU Keay, Brian A.; Plaumann, Heinz P.; Rajapaksa, Dayananda; Rodrigo, Russell

CS Guelph-Waterloo Cent. Grad. Work Chem., Univ. Waterloo, Waterloo, ON, N2L 3G1, Can.

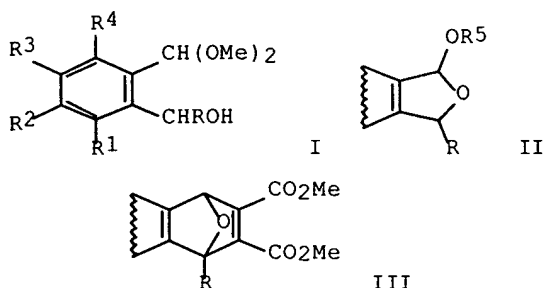
SO Can. J. Chem. (1983), 61(9), 1987-95

CODEN: CJCHAG; ISSN: 0008-4042

DT Journal

LA English

GI



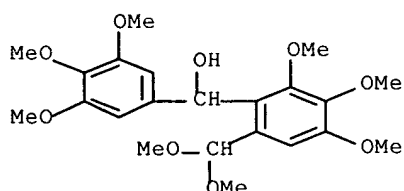
AB A general method for the generation of isobenzofuran intermediates is described. Lithiated arom. acetals are converted to hydroxy acetals I ( $R$  = substituted Ph,  $R_1$ - $R_4$  = H, OMe,  $R_2R_3$  = OCH<sub>2</sub>O), which are cyclized to isobenzofurans by mild acid treatment through the hydroxyphthalans II ( $R_5$  = H, Me). The isobenzofurans generated in situ are trapped by a variety of dienophiles to give the oxabicyclo adducts, e.g., III. The mass spectra and NMR spectra of II and III are discussed.

IT 87850-24-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn., cyclization, and Diels-Alder reaction of)

RN 87850-24-6 HCAPLUS

CN Benzenemethanol, 6-(dimethoxymethyl)-2,3,4-trimethoxy-.alpha.-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)



L9 ANSWER 19 OF 21 HCAPLUS COPYRIGHT 1999 ACS

AN 1978:169703 HCAPLUS

DN 88:169703

TI Reactions of halomagnesium alcoholates of aromatic alcohols with perfluorinated halomagnesium thiophenolates in the presence of ethyl formate

AU Bogoslovskii, N. V.; Kolbina, N. M.

CS Perm. Gos. Univ., Perm, USSR

SO Org. Khim. (1976), 39-43. Editor(s): Lapkin, I. I. Publisher: Permsk. Gos. Univ. im. A. M. Gor'kogo, Perm, USSR.

CODEN: 37LPAM

DT Conference

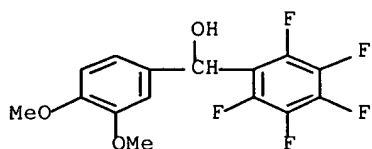
LA Russian

AB C6F5MgCl reacted with S to give C6F5SMgCl, which reacted with RCH2OMgBr  
 (R = Ph, 3,4-Cl2C6H3, .alpha.-naphthyl) and HCO2Et to give 45-55% RCH2SC6F5  
 (I). I were oxidized with 30% H2O2 to yield 88-98% RCH2SO2C6F5. The  
 analogous reaction of C6F5CHROMgCl [R = Ph, 4-ClC6H4, 4-BrC6H4,  
 2,4-Cl2C6H3, 3,4-(MeO)2C6H3] (from C6F5MgCl and RCHO) gave 57-81%  
 C6F5CHROH but no sulfides.

IT 66390-45-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

RN 66390-45-2 HCAPLUS

CN Benzenemethanol, .alpha.-(3,4-dimethoxyphenyl)-2,3,4,5,6-pentafluoro-  
 (9CI) (CA INDEX NAME)



L9 ANSWER 20 OF 21 HCAPLUS COPYRIGHT 1999 ACS

AN 1972:126515 HCAPLUS

DN 76:126515

TI Reactions of halometal alcoholates. I. Synthesis of  
 methylhydroxydiarylmethanes

AU Lapkin, I. I.; Belonovich, M. I.; D'yakova, G. F.

CS Perm. Gos. Univ., Perm, USSR

SO Zh. Org. Khim. (1972), 8(2), 292-3  
 CODEN: ZORKAE

DT Journal

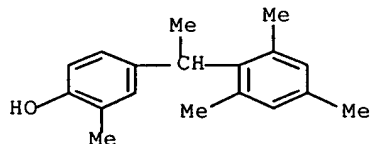
LA Russian

AB RCHMeOMgBr (R = Ph, 2-MeOC6H4, 2- and 4-MeC6H4, 2,5-Me2C6H3,  
 2,4,6-Me3C6H2) reacted with HCO2Et to form RCHMeBr, which gave the  
 corresponding RCHMeR1 (R1 = hydroxyaryl) in 40-70% yield with 7 R1OMgBr.

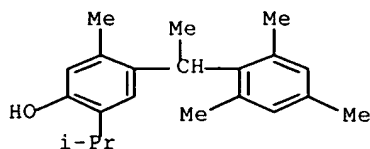
IT 35770-83-3P 35770-85-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

RN 35770-83-3 HCAPLUS

CN Phenol, 2-methyl-4-[1-(2,4,6-trimethylphenyl)ethyl]- (9CI) (CA INDEX  
 NAME)

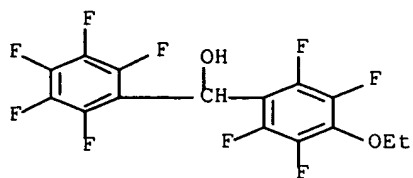


RN 35770-85-5 HCAPLUS  
 CN Phenol, 5-methyl-2-(1-methylethyl)-4-[1-(2,4,6-trimethylphenyl)ethyl]-  
 (9CI) (CA INDEX NAME)



L9 ANSWER 21 OF 21 HCAPLUS COPYRIGHT 1999 ACS  
 AN 1970:89960 HCAPLUS  
 DN 72:89960  
 TI Reaction of polyfluoro-substituted aromatic ketones with potassium cyanide  
 AU Vasilevskaya, T. N.; Badashkeeva, A. G.; Gerasimova, T. N.; Barkhash, V. A.; Vorozhtsov, N. N., Jr.  
 CS Novosibirsk. Inst. Org. Khim., Novosibirsk, USSR  
 SO Zh. Org. Khim. (1970), 6(1), 126-32  
 CODEN: ZORKAE  
 DT Journal  
 LA Russian  
 AB The vigorous reaction of (C<sub>6</sub>F<sub>5</sub>)<sub>2</sub>CO with KCN in abs. EtOH at 20.degree. gave C<sub>6</sub>F<sub>5</sub>H, 2,3,5,6-F<sub>4</sub>C<sub>6</sub>H<sub>2</sub> (I), C<sub>6</sub>F<sub>5</sub>CO<sub>2</sub>Et (II), 2,3,5,6,4-F<sub>4</sub>(EtO)C<sub>6</sub>CO<sub>2</sub>Et (III), and 2,3,5,6,7-F<sub>4</sub>(EtO)C<sub>6</sub>COC<sub>6</sub>F<sub>5</sub> (IV). The compds. were sepd. by gas chromatog. and identified by NMR. The reaction of II with EtONa gave  
 III. Refluxing C<sub>6</sub>F<sub>5</sub>Br with EtONa in EtOH gave 2,3,5,6,4-F<sub>4</sub>(EtO)C<sub>6</sub>Br (V) which was converted to its Grignard compd. and reacted with C<sub>6</sub>F<sub>5</sub>CHO to give 2,3,5,6,4-F<sub>4</sub>(EtO)C<sub>6</sub>CH(OH)C<sub>6</sub>F<sub>5</sub>, which on oxidn. with CrO<sub>3</sub> gave IV. The reaction of C<sub>6</sub>F<sub>5</sub>COPh with KCN in EtOH at 75.degree. gave C<sub>6</sub>F<sub>5</sub>H, I, and 2,3,5,6,4-F<sub>4</sub>(EtO)C<sub>6</sub>COPh (VI). Reacting V with Mg and PhCHO in abs. Et<sub>2</sub>O gave 2,3,5,6,4-F<sub>4</sub>(EtO)-C<sub>6</sub>CH(OH)Ph which was oxidized to VI. The reaction of C<sub>6</sub>F<sub>5</sub>-COMe with KCN in EtOH at 60-70.degree. gave C<sub>6</sub>F<sub>5</sub>H, I, AcOEt, 2,3,5,6-F<sub>4</sub>C<sub>6</sub>H<sub>2</sub>(:NH)OEt (VII), 3,5,6,2-F<sub>3</sub>(EtO)C<sub>6</sub>H<sub>2</sub>CN, and 2,3,5,6,4-F<sub>4</sub>(EtO)C<sub>6</sub>COMe (VIII). Treating V with Mg and Ac<sub>2</sub>O gave VIII. The treatment of VII with HCl in Et<sub>2</sub>O gave 2,3,5,6-F<sub>4</sub>C<sub>6</sub>H<sub>2</sub>CONH<sub>2</sub>.  
 IT 28293-48-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)  
 RN 28293-48-3 HCAPLUS  
 CN Benzhydrol, 4-ethoxy-2,2',3,3',4',5,5',6,6'-nonafluoro- (8CI) (CA INDEX NAME)

C-linked Search



## Benzoquinone structures

L4 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 1999 ACS

AN 1999:9803 HCAPLUS

TI Preparation of phenoxyakanoates as **thyroid** hormone receptor  
.beta. agonistsIN Scanlan, Thomas S.; Chellini, Grazia; Yoshihara, Hikari; Apriletti,  
James;

Baxter, John D.; Ribeiro, Ralff C. J.

PA The Regents of the University of California, USA

SO PCT Int. Appl., 45 pp.

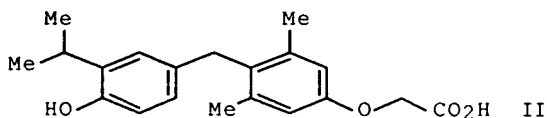
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9857919	A1	19981223	WO 98-US11758	19980608
	W: AU, CA, JP, KP, KR				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRAI	US 97-877792		19970618		
GI					



AB R3OZ1CR1R2Z2O(CH2)nCO2R [I; R = H or (cyclo)alkyl; R1,R2 = H or alkyl; 1 of R1,R2 = H and the other = OH; R1R2 = O; R3 = H, (cyclo)alkyl, acyl; Z1 = (un)substituted 1,4-phenylene; Z2 = (un)substituted 3,5-dimethyl-4,1-phenylene] were prep'd. Thus, 4-bromo-2-isopropylanisole was condensed with 2,6-dimethyl-4-methoxybenzaldehyde (prepn. each given) and the product converted in 4 steps to title comp'd. II. Data for biol. activity of I were given.

IT 218431-20-0P 218431-21-1P 218431-24-4P

218431-25-5P 218431-26-6P

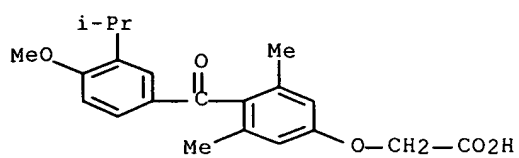
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of phenoxyakanoates as **thyroid** hormone receptor  
.beta. agonists)

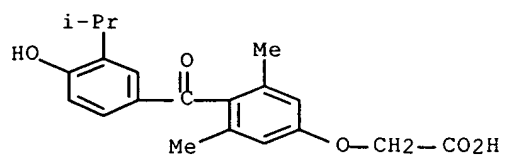
RN 218431-20-0 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

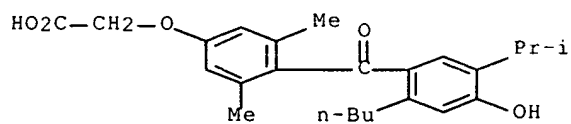




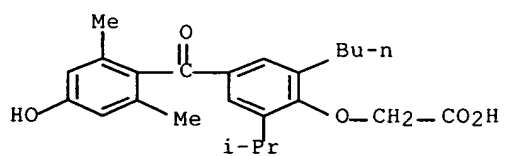
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CN INDEX NAME NOT YET ASSIGNED



RN 218431-24-4 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED

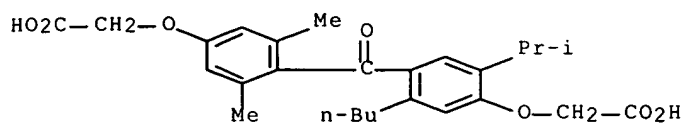


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CN INDEX NAME NOT YET ASSIGNED

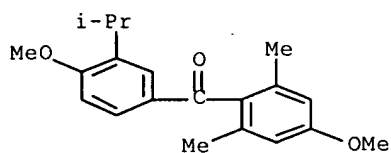


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CN INDEX NAME NOT YET ASSIGNED

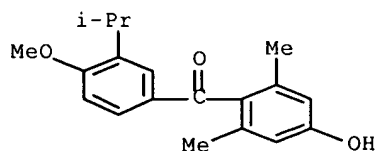
C-linked Search



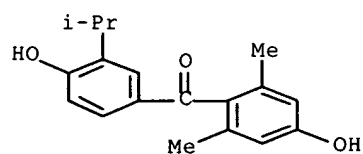
IT 214544-31-7P 218431-17-5P 218431-19-7P  
 218431-22-2P 218431-23-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of phenoxyakanoates as thyroid hormone receptor  
 .beta. agonists)  
 RN 214544-31-7 HCAPLUS  
 CN Methanone, (4-methoxy-2,6-dimethylphenyl) [4-methoxy-3-(1-  
 methylethyl)phenyl]- (9CI) (CA INDEX NAME)



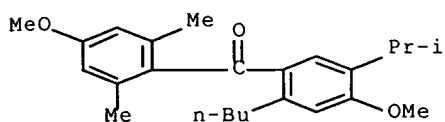
RN 218431-17-5 HCAPLUS  
 CN INDEX NAME NOT YET ASSIGNED



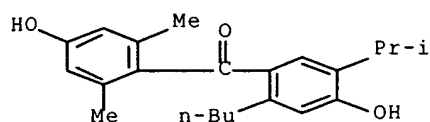
RN 218431-19-7 HCAPLUS  
 CN INDEX NAME NOT YET ASSIGNED



RN 218431-22-2 HCAPLUS  
 CN INDEX NAME NOT YET ASSIGNED

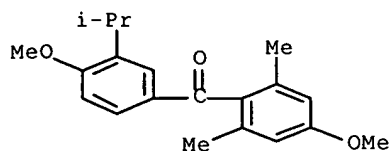


RN 218431-23-3 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED



L4 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 1999 ACS  
AN 1998:617873 HCAPLUS  
DN 129:302827  
TI An efficient substitution reaction for the preparation of **thyroid** hormone analoges  
AU Yoshihara, Hikari A. I.; Chiellini, Grazia; Mitchison, Timothy J.; Scanlan, Thomas S.  
CS Department of Cellular and Molecular Pharmacology, University of California, San Francisco, CA, 94143-0450, USA  
SO Bioorg. Med. Chem. (1998), 6(8), 1179-1183  
CODEN: BMECEP; ISSN: 0968-0896  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
AB The substitution of the sterically hindered carbon of the potent **thyroid** hormone agonist, GC-1, was effected by a reaction based on the solvolysis of the benzylic hydroxyl group. The reaction was found to proceed in high yield with a variety of nucleophiles including alcs., thiols, allyl silanes and electron-rich arom. compds., providing a convenient route to the synthesis of new **thyroid** hormone analogs.  
IT 214544-31-7P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of **thyroid** hormone analoges via substitution reaction)  
RN 214544-31-7 HCAPLUS  
CN Methanone, (4-methoxy-2,6-dimethylphenyl) [4-methoxy-3-(1-methylethyl)phenyl]- (9CI) (CA INDEX NAME)

C-linked Search

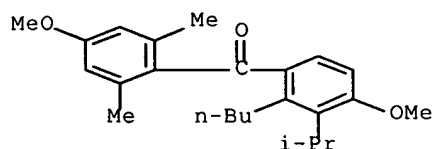


IT 214544-32-8P 214544-34-0P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of thyroid hormone analogs via substitution reaction)

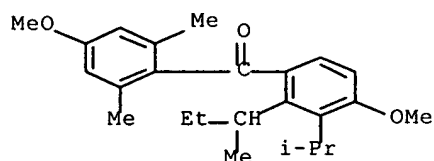
RN 214544-32-8 HCAPLUS

CN Methanone, [2-butyl-4-methoxy-3-(1-methylethyl)phenyl] (4-methoxy-2,6-dimethylphenyl)- (9CI) (CA INDEX NAME)



RN 214544-34-0 HCAPLUS

CN Methanone, (4-methoxy-2,6-dimethylphenyl) [4-methoxy-3-(1-methylethyl)-2-(1-methylpropyl)phenyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 1999 ACS

AN 1984:584212 HCAPLUS

DN 101:184212

TI Comparative effects of thyroid hormone analogs on the activities of brain and liver mitochondria and nuclei in thyroidectomized rats

AU Dembri, A.; Michel, R.; Michel, O.; Belkhiria, M.; Jorgensen, E. C.

CS Coll. France, Paris, 75231, Fr.

SO Mol. Cell. Endocrinol. (1984), 37(2), 223-32

CODEN: MCEND6; ISSN: 0303-7207

DT Journal

LA English

AB Several thyroid hormone analogs were tested for thyromimetic

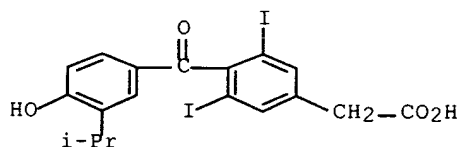
activity on rat brain and liver subcellular organelles. The compds. were administered immediately after thyroidectomy to 90 g male rats for 10 days, by daily s.c. injection. In cerebral cortex and liver, the activities of mitochondrial succinate cytochrome c reductase [9028-10-8] and .alpha.-glycerophosphate dehydrogenase [9075-65-4] and nuclear RNA polymerase [9014-24-8] were measured. Brain mitochondrial enzymes were unchanged in thyroidectomized (Tx) and in Tx-treated rats, whereas the activities of these enzymes in liver mitochondria were partially restored by the treatments. RNA polymerase I activity in brain and liver dropped significantly 10 days after thyroidectomy and daily injection of **thyroid** hormones or analogs maintained the nuclear activity at a normal level. Correlation between the structure of **thyroid** hormone analogs and their subcellular effects is in good agreement with previous binding and in vivo studies. Enzyme activities stimulated by T3 [6893-02-3] were lowered by replacing the T3 side-chain by an acetic acid group or by substituting the bridged O atom by atom by CO. In contrast, the activity was enhanced by substituting I with a 3' iso-Pr group. Although less active than I, the 3,5-di-Me substituents may be introduced without a complete loss of nuclear activity.

IT 92814-41-0

RL: BAC (Biological activity or effector, except adverse); BIOL  
(Biological study)  
(thyromimetic activity of, structure in relation to)

RN 92814-41-0 HCAPLUS

CN Benzeneacetic acid, 4-[4-hydroxy-3-(1-methylethyl)benzoyl]-3,5-diiodo-  
(9CI) (CA INDEX NAME)



L4 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 1999 ACS

AN 1982:518486 HCAPLUS

DN 97:118486

TI Methyl 3,5-diiodo-4-(3-isopropyl-4-methoxybenzoyl)benzoate

AU Cody, Vivian; Cheung, Ellen; Jorgensen, Eugene C.

CS Med. Found. Buffalo, Inc., Buffalo, NY, 14203, USA

SO Acta Crystallogr., Sect. B (1982), B38(8), 2270-2

CODEN: ACBCAR; ISSN: 0567-7408

DT Journal

LA English

AB The title compd. is orthorhombic, space group Iba2, with a 20.998(3), b 24.002(4), and c 8.032(1) .ANG.; Z = 8 for dc = 1.85; R = 6.6%. The conformation of the di-Ph ketone bridge is skewed and the iso-Pr group distally oriented, as is obsd. for many **thyroid** hormone analog structures. There is a short I...O intermol. contact between I(5) and

the

carbonyl O [3.17(10) .ANG.]. At. coordinates are given.

IT 82897-04-9

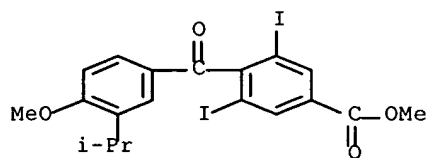
RL: PRP (Properties)

C-linked Search

(structure of)

RN 82897-04-9 HCAPLUS

CN Benzoic acid, 3,5-diiodo-4-[4-methoxy-3-(1-methylethyl)benzoyl]-, methyl ester (9CI) (CA INDEX NAME)



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